# San Francisco Bay Area Regional ITS Architecture

Maintenance Committee

Metropolitan Transportation Commission Claremont Room, MTC, 101 Eighth Street, Oakland, California 94607 01/09/2007



# **Summary of Maintenance Committee Meeting 06/14/2006**

- Three ITS projects were submitted for Architecture inclusion
  - Solano County Transit AVL Approved for inclusion
  - LAVTA CAD/AVL Approved for inclusion
  - Vallejo Transit Vehicle Radio & Fareboxes Not approved for inclusion
- The Maintenance Committee will play an advisory role in the upcoming Architecture Update



#### Golden Gate Bridge Highway and Transportation District Radio Replacement

- Proposed by Golden Gate Bridge Highway & Transportation District
- The project will replace, enhance, and expand the existing transit communication system
- The project is recommended for incorporation in the Bay Area Regional ITS Architecture



#### **ITS Architecture Basics**

- What is an ITS Architecture
  - A framework designed to facilitate information sharing and control coordination for ITS
- Why Bay Area needs an ITS Architecture
  - To satisfy Federal requirements and qualify for Federal funding
  - To identify stakeholders
  - To document the existing resources
  - To provide a structured framework for deployment and integration
  - To identify "gaps" in systems or services



#### Bay Area Regional ITS Architecture Update 2007- Overview

- ITS Architecture is a dynamic document that needs to be modified periodically to reflect the current system and region's needs
- Architecture update should be coordinated with RTP update every three years. (RTP was last completed in February 2005)
- The updated Architecture will be user-friendly and easy to access and use for project planning, funding, and procurement staff.



#### **Architecture Update Objective**

- The updated Bay Area ITS Architecture will
  - Reflect changes to the Bay Area ITS system since the Architecture's completion
  - Focus on new data exchange requirements and new user services
  - Enhance usability for project planning, funding, and procurement
  - Minimize maintenance work



#### **Existing Architecture Overview**

- Existing Architecture completed by MTC in 2004
- First ITS Architecture for Bay Area
- Based on National ITS Architecture 4.0 (to be 6.0 in early 2007)
- Used Turbo Architecture 2.0 (Now 3.0)
- Maintained by MTC & the Architecture Maintenance Committee
- Ready for the first major update



# **Existing Architecture Components Review**

#### Accessible from

http://mtc.ca.gov/planning/ITS/

#### Current Architecture Components

- Stakeholder list,
- ITS inventory,
- ITS needs and user services
- Operational concepts
- Functional requirements
- Information flow and interconnect
- ITS standards
- Interagency agreements
- ITS project database
- Use and maintenance



### **Architecture Update Scope**

- Architecture Inclusion Guideline Which projects need to be submitted to the RA?
- Streamline Architecture Make RA easier to use
- Update Architecture Components
  - Solicit changes and inputs from stakeholders
  - Committee reviews the proposed changes
  - Changes are incorporated in the Architecture
- Final Report and Executive Summary
- Architecture Outreach Strategy and Usage Education

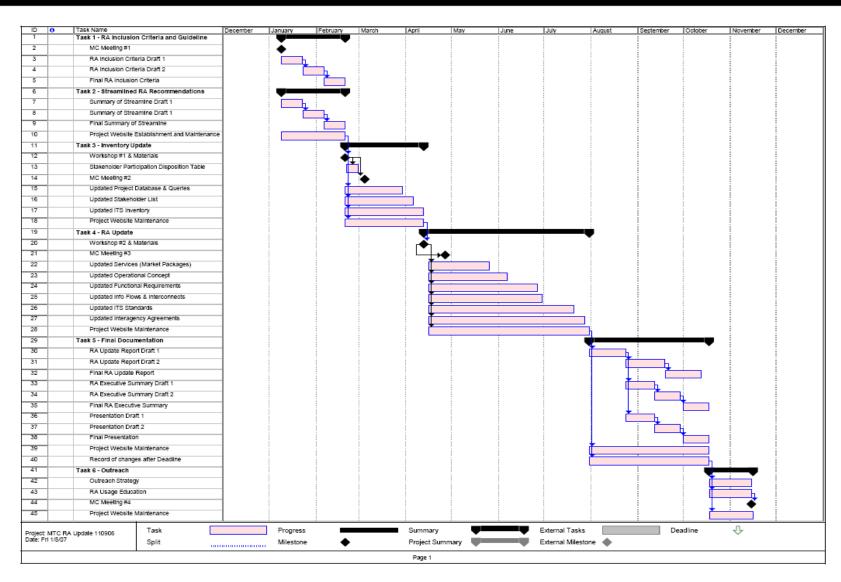


# **Architecture Update Scope** (continued)

- Address the changes from the upgrade of National ITS Architecture to Version 6.0
- Document the updated Bay Area ITS Architecture in the latest Turbo Architecture 3.0
- Add references to the Statewide ITS
   Architecture for interregional services and integration
- Incorporate proposed updates submitted after the development baseline Architecture (documented in Table 11 of the existing Architecture)



## Bay Area Regional ITS Architecture Update 2007





#### Deliverables for Maintenance Committee Review

- Deliverables for the Architecture Update will be reviewed by both MTC and the Maintenance Committee
- For the Maintenance Committee, Deliverables will be published on the project website with an email notification.



# Milestones for Outreach Activities – Stakeholder Workshop 1

- RA update introduction to stakeholders
- Introduce guidelines regarding which projects need to be submitted to the Bay Area ITS Architecture
- Collect changes in ITS inventory
- Discuss changes in ITS needs and user services in Bay Area
- Solicit new ITS projects
- Verify stakeholder contact information



## Milestones for Outreach Activities – MC Meeting 2

- Review work progress
  - Guidelines regarding RA inclusion
  - Summary of RA streamline recommendations
- Summarize inputs received in the previous stakeholder workshop regarding
  - ITS Inventory
  - ITS Needs and User Services
  - Stakeholder List
  - New ITS Projects
- Approve proposed changes



# Milestones for Outreach Activities – Stakeholder Workshop 2

- Summarize project status and changes made to
  - ITS Inventory
  - ITS Needs and User Services
  - Stakeholder List
  - New ITS Projects
- Collect stakeholder inputs regarding changes to
  - Operational Concepts
  - Functional Requirements
  - Information Flow and Interconnects
  - ITS Standards
  - Interagency Agreements



## Milestones for Outreach Activities – MC Meeting 3

- Summarize project status and changes made to
  - ITS Inventory
  - ITS Needs and User Services
  - Stakeholder List
  - New ITS Projects
- Summarize inputs received in the previous stakeholder workshop regarding
  - Operational Concepts
  - Functional Requirements
  - Information Flow and Interconnects
  - ITS Standards
  - Interagency Agreements
- Approve proposed changes



## Milestones for Outreach Activities – MC Meeting 4

- Review final report, final executive summary, and final presentation.
- Introduce the outreach strategy and RA usage education
- Conclude the RA Update project

